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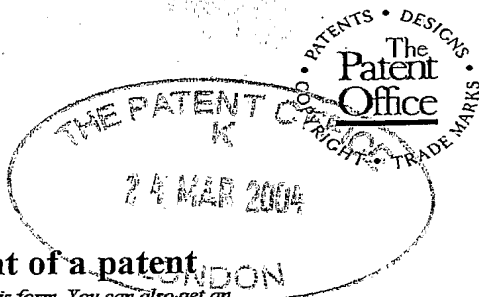
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24 MAR 2004

The Patent Office

Cardiff Road  
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1. Your reference KNE.003-0001/2

2. Patent application number 0406613.0  
(The Patent Office will fill this part in)

3. Full name, address and postcode of the or of each applicant (underline all surnames)  
Kneads Must Limited  
23 Lloyd Villas, Lewisham Way  
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Patents ADP number (if you know it)

If the applicant is a corporate body, give the country/state of its incorporation

08780694001

4. Title of the invention MASSAGING DEVICE

5. Name of your agent (if you have one) HAMMONDS

"Address for service" in the United Kingdom to which all correspondence should be sent (including the postcode)

7 Devonshire Square  
Cutlers Gardens  
London  
EC2M 4YH

Patents ADP number (if you know it)

08621328001

6. Priority: Complete this section if you are declaring priority from one or more earlier patent applications, filed in the last 12 months.	Country	Priority application number (if you know it)	Date of filing (day / month / year)
	GB	0330185.0	30 Dec 2003
	GB	0402646.4	06 Feb 2004

7. Divisionals, etc: Complete this section only if this application is a divisional application or resulted from an entitlement dispute (see note f)	Number of earlier UK application	Date of filing (day / month / year)

8. Is a Patents Form 7/77 (Statement of inventorship and of right to grant of a patent) required in support of this request? YES

Answer YES if:

- a) any applicant named in part 3 is not an inventor, or
- b) there is an inventor who is not named as an applicant, or
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Continuation sheets of this form 0

Description 6

Claim (s) 0

Abstract 1

Drawing (s) 2 + 2 *92*

10. If you are also filing any of the following, state how many against each item.

Priority documents

Translations of priority documents

Statement of inventorship and right to grant of a patent (Patents Form 7/77)

Request for a preliminary examination and search (Patents Form 9/77)

Request for substantive examination (Patents Form 10/77)

Any other documents (please specify)

11. I/We request the grant of patent on the basis of this application.

Signature(s)

*Kathleen Harris for Hammonds*

Date 24 March 2004

12. Name, daytime telephone number and e-mail address, if any, of person to contact in the United Kingdom

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## MASSAGING DEVICE

### FIELD OF APPLICATION

5 The present invention relates to a hand-held massaging device for use in the application of foot massage involving the following manoeuvres: vibrations, petrissage and Reflexology pressure point therapy.

### BACKGROUND

10 The present invention relates to a massage device that is hand-held and requires the addition of a complimentary hammer implement that has a weighted, rounded head in order to fulfil its vibratory function. In particular, the massage device is useful in carrying out two "Swedish" massage applications – vibrations and focused petrissage. In addition, pressure points on the feet, based on Reflexology can be manipulated and triggered through the use of the device.

15 Vibrations are an application used in Swedish massage that aims to 'shake' the muscles in order to release tension and tightness. It is a great pain reliever that clears nerve pathways and 'surprises' the muscle into releasing its tension. It can either be a stimulating or a relaxing stroke, depending on the needs of the recipient.

20 Petrissage movements involve various ways of kneading the skin and muscles. These movements help in strengthening the muscle structures by stimulating the deep layers of tissue and also help to increase the supply of blood to the area. Kneading motions are employed to work muscle against muscle or muscle against bone or both, thus breaking down tension build-up within the muscles. At the same time, they also improve the flow of lymph, which basically consists of the blood's waste products. Because of the foot's limited spatial area, most petrissage would be a focused petrissage, that being small movements in very localised areas. This is a firmer movement and entails working areas of muscle through small circular movements throughout foot's fleshy areas. Light  
30 kneading eases the top muscle layers while firmer kneading works on the deeper muscles.

Pressure point therapy is based on Reflexology, involving the theory that nerve endings embedded in the feet are connected to all areas of the body through the spinal cord.  
35 Stimulation of these nerve endings helps to promote relaxation, stimulate vital organs

and encourages the natural healing processes of the body. A Reflexology treatment involves massage of the soles and tops of the feet. This type of massage treatment does not make use of oils. The reflex points are small and precision is important. When these points are pressed, they release muscular tension and promote the circulation of blood and lymph in addition to stimulating the body's natural healing abilities. Advantages of using Reflexology in foot massage include relieving pain, balancing the body's systems and maintaining overall good health. The therapist usually employs the thumbs to press on key points on the surface of the foot in order to stimulate the body's natural self-curative abilities. However, long-term use of the thumbs in Reflexology is a common cause of RSI – the pressure being exerted on the thumbs for the application of Reflexology over an extended period of time has often resulted in semi or permanent damage to the thumbs. The device proposed, however, is specifically designed to carry out both localised petrissage and the application of Reflexology pressure points without putting undue pressure on the thumbs, therefore allowing the recipient of foot massage to experience a longer, more thorough foot massage without fatigue or damage to the user.

### BRIEF DESCRIPTION OF THE FIGURES

In the Figures:

- FIGURE 1 is a depiction of the hand held massage device with an extended rectangular top (1) that is attached to a circular bottom (3) by way of a small, thin rectangular strip projecting from the bottom edge of the larger rectangle and connecting through the top down to the middle portion of the circular bottom on the same side (2).
- FIGURE 2 Illustrates a side view of the tool, the upper part and middle parts of the tool forming a straight edge (1) and the bottom orb of the tool (2) remaining, circular in shape.
- FIGURE 3 the hammer implement is of a generic hammer design that must have a weighted head counter-balanced on both sides in order for it to carry out its vibratory function when striking the device. Although it is not imperative, it would be beneficial for the hammer implement to be at least double the size of the device and length in order to create the pressure needed to result in a vibration that is powerful enough to carry through the tool and onto the sole of the foot.

## OBJECTS AND STATEMENT OF THE INVENTION

The object of the present invention is to supply an all-round device that is easy to manipulate and provides the recipient with a beneficial massage using the aforementioned foot massage applications. The device of the present invention is light  
5 in weight, and is easy to use. The device is used directly on skin and requires to application of lubricants of any kind. The device is two-fold and used in conjunction with a hammer implement for the application of vibrations throughout the sole of the foot. The device can, however, be used on its own (without employing the hammer implement) for the application of localised petrissage and Reflexology pressure points  
10 throughout the sole of the foot.

Various massage implements currently available almost invariably concentrate on only one type of massage movement – usually, with foot massage, either focusing solely on mechanical vibrations or pressure points. Mechanical (motorised) vibrations, either by  
15 way of a mechanised hand-held tool or spa footbath tend to be too generalised and often result in a numbing effect on the area of application if used for more than a few minutes. Likewise, Reflexology points, though proven to be effective for the body's well-being, do not always provide the soothing effect that tired and sore feet need from a foot massage. In addition, there are several roller type implements on the market that consist  
20 of a cylindrical roller that the recipient can utilise by putting their foot on the cylinder and rolling it back and forth (thus carrying out a very basic effleurage movement). An individual application, though superficially helpful, would not necessarily be as beneficial to the recipient as all three applications would be in one tool (i.e. vibrations, petrissage and pressure points) and if a tool originally designed for an individual application is used  
25 for a massage application that it was not designed, this could potentially result in the recipient experiencing discomfort or injury, especially concerning potentially sensitive areas like the soles of the feet. Likewise, the user could also experience discomfort or injury by inappropriately using tools for the task at hand. The proposed tool has been designed to carry out all three functions and even improves on such techniques without  
30 undue strain or discomfort to either the user or recipient.

The present invention is innovative in that this novel device provides an effective and invigorating massage to the recipient while the design provides maximum comfort and protection to the user of the present invention. The present device may be fashioned  
35 from any durable material such as plastic, stone, resin, wood or metal. The device



requires no use of lubricants. However, if the device were to be used with oils or other such lubricating agents then it would be desirable to have the device made from an easily washable material. It is also possible for the device to be made of a material that can be heated, for example, by using hot water or even a microwave and such material should hold the heat for a sufficient period of time (without scalding or burning either the user or the recipient with the heated device during massage), so that the recipient receives the benefit of the use of heat during a massage.

The function of the whole of the upper part of the device is to create the effect of vibrations on the sole of the foot and is to be used in conjunction with a separate hammer implement. The head of the hammer must be weighted enough to create the pressure needed to result in a vibration that is powerful enough to carry through the tool and onto the sole of the foot. The upper part of the tool (1) is flat and rectangular in shape and has gently rounded edges to provide both comfort to the user and ensure that no area of the tool will "dig" or "gouge" into the recipient during a foot massage. The upper part of the tool (1) is approximately 3 inches long, 1 inch wide and is approximately 1/16 thick (it must be thin enough to allow vibrations to travel through the device to the sole of the foot after the top of the tool is struck with the hammer implement). The upper part of the tool can be used all over the sole of the foot and is small and agile enough to be manipulated into tight areas (around the toes) or difficult, spatial areas such as the arch of the foot, to create an effective, vibrating massage.

The function of the lower part of the device (3) is to carry out localised petrissage and Reflexology pressure point movements. The lower part of the tool (3) consists of a solid circle that is approximately 1 inch in diameter and requires no application of the hammer at all in order to carry out its function. The circular orb is wide enough to achieve a balanced and effective pressure and therefore avoid poking the recipient when application of deep pressure points are applied. The orb's circular shape is also graceful and affords easy manipulation in the employment of the more sweeping circular movements that are required for petrissage. The circular proportions of the base of the present invention can successfully negotiate difficult areas that the limited spatial range of the foot entails, such as the ball, the heel and the arch of the foot with ease for the user and comfort for the recipient to ensure a successful foot massage.

The sole function of the middle part of the device (2) is to connect the upper part of the tool (1) to the lower part of the tool (3) and vice versa. The middle part of the tool (2) comprises a thin rectangle that is  $\frac{3}{4}$  inch long and approximately  $\frac{1}{8}$  inch wide and  $\frac{1}{16}$  inch thick. The middle part of the tool (2) extends from the upper part of the device (1) at the bottom right hand corner of the upper part of the tool (or left hand corner depending on which way the tool is being held, please see note below). The middle part of the tool extends the right edge of the upper part of the tool downwards to meet the lower part of the device (3). The middle part of the tool intersects the lower part of the device, that being the circular orb base, at its uppermost right-hand side and extends down to the right-hand middle part of the orb, thus creating a straight right edge to the device. This particular intersection of a rectangular shape meeting a circular shape means that the left-hand edge of the middle section of the device is a  $\frac{1}{2}$  inch in exposed length and the right edge of the middle part of the tool is  $\frac{3}{4}$  inch in exposed length. (\*\* PLEASE NOTE: the reference to the right-hand side of the tool can easily be viewed as the left-hand side of the device, depending on how the tool is being held, i.e. the effect of mirror-imaging makes the right-side of the device become its opposite side when the device is turned around in the hand. For the purposes of this application, the right-hand edge/view is being described.)

The upper (1) and lower (3) parts of the device, though carrying out separate functions (the upper part (1) involving vibrations and interaction with a hammer implement and the lower part (3) involving petrissage and Reflexology pressure points requiring no interaction with the hammer implement) are dependant upon one another in order for each section (the lower and the upper parts of the device) to fulfil their separate functions. In order to achieve the vibrations effect that the upper part of the device (1) is designed for, the user must avail of the lower part of the device (3) to position the upper part of the tool into place upon the sole of the foot being massaged. By holding the lower orb base (3) in between the user's thumb and forefinger, the upper part of the tool can be firmly manipulated into place and the user's other hand is then free to wield the hammer implement onto the point where the upper part of the tool makes contact with the sole of the foot (this is usually the topmost part of the upper part of the tool but can vary depending on the part of the foot being massaged). Likewise, in order to carry out the petrissage and/or Reflexology points that the lower part of the tool (3) has been designed for, the user needs to approach the tool from above, utilising the upper part of the tool (1). Grasping the whole of the rectangular upper part of the device (1) in the

palm of the hand, the user therefore steadies the fingers of their hand against the right-hand edge created by the upper part of the tool (1) extending down through the middle part of the tool (2) and intersecting into the lower part of the tool (3). The user's thumb is then free to access the orb through the free space opposite the edge being employed, that being the free space in between the topmost and bottom-most parts of the device created by the middle portion of the device bridging the two. The user's thumb can then be placed on the opposite side of the orb in order to create a controlled pressure for petrissage/Reflexology points that the recipient will benefit from but will not put undue pressure on the user in any way.

Such versatility, in application or ease of use, is not available through other massage tools currently available or described in literature. In addition, its dual purposes are achieved through its upper and bottom-most parts, both designed to provide adequate support to the wrist and allowing for the application of the increased pressure needed to achieve deep petrissage or pressure points as well as vibration massage, which can be of great benefit to the recipient to relieve tension in the feet. One of the benefits of this invention is that regardless of the intensity of the pressure, such pressure will be evenly distributed through the device without exhausting the user while providing relaxation to the recipient of such a massage.

It is also envisaged that the massage device of the present invention does not require the application of oils or lubricants. The device is designed to be used in conjunction with a hammer implement that has a weighted head and is to be provided with the proposed tool as one unit. The device is completely solid and can be any colour, according to the manufacturing material used.

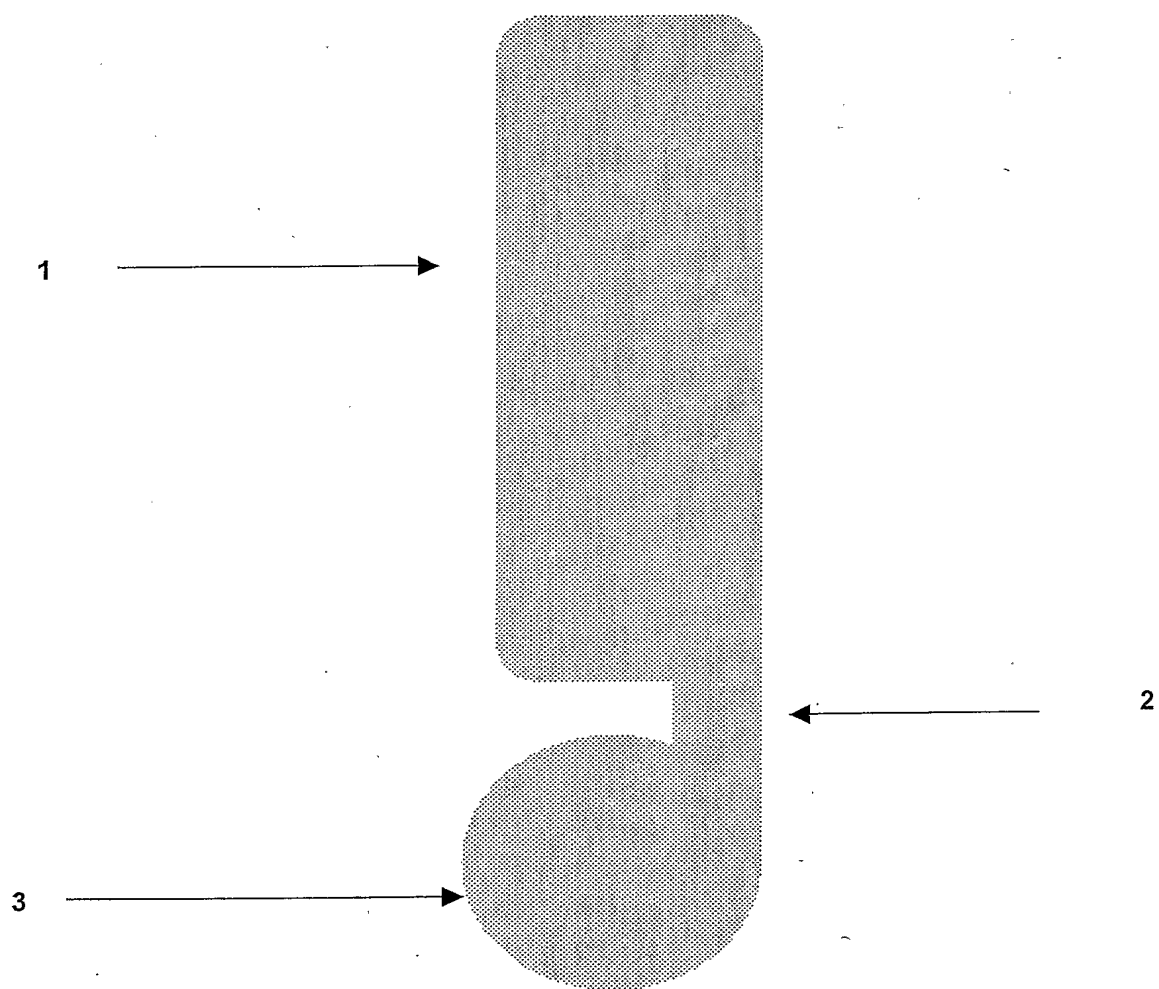
While the present massaging device has been described with various preferred embodiments thereof, it will be understood that this description is intended to illustrate and not to limit the scope of the invention. The optional dimensional relationships for all parts of the invention are to include all variations in size, materials, shape, form, function and operation, which are deemed readily apparent and obvious to those skilled in the art. All equivalent relationships to those illustrated in the figures and described in the specification are intended to be encompassed in this invention what is desired to be protected is defined by the following claims.

**ABSTRACT**  
**MASSAGING DEVICE**

- 5 The present invention relates to a hand-held massaging device suitable for use in performing the following foot massage applications: vibrations, petrissage (kneading) and Reflexology pressure point therapy. The device is designed such that a user can self-massage or a user can assist or perform a massage on a person in need of a foot massage treatment.

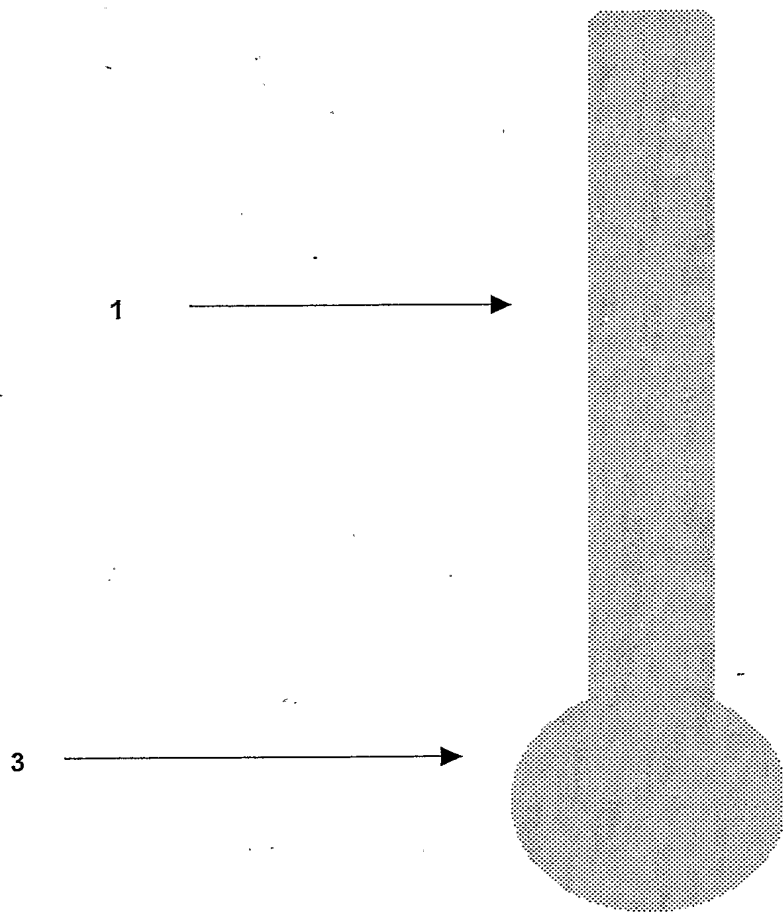


FIGURE 1





**FIGURE 2**



**Side view**



